CONFERENCE ON DISARMAMENT

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CANADA AND THE NETHERLANDS

REPORT ON A JOINT CHEMICAL WEAPONS TRIAL CHALLENGE INSPECTION

1. INTRODUCTION

1.1 On 26 to 28 November 1990, Canada and the Netherlands conducted a bilateral chemical weapons trial challenge inspection at the Canadian Forces Base in Lahr, Germany.

The inspection was carried out, on the Canadian side, by military personnel and defence scientists of the Department of National Defence supported by External Affairs and International Trade Canada; and, on the Netherlands side, by the Ministries of Foreign Affairs and Defence in collaboration with the Netherlands Organisation for Applied Scientific Research (TNO). It was the first bilateral trial inspection for both countries, and demonstrated the utility of conducting multinational exercises. It also demonstrated that reliable conclusions could be drawn under circumstances of managed access at an operational military airfield including garrisonned land forces.

1.2 Aims of the inspection

The aims of the trial inspection were:

1. to test the procedures as laid down in the Protocol on Inspection Procedures in the "Rolling Text" in practice;

2. to ascertain that compliance with the Chemical Weapons Convention could be determined without sensitive information being divulged; and

3. to train the participants in organising, carrying out and escorting such an inspection.

1.3 The Facility Inspected

The trial challenge inspection was carried out at an approximately 1,000 hectares operational base of the Canadian Forces, which housed inter alia:

- single runway, aircraft dispersals and shelters
- one tank battalion
- one mechanized infantry battalion
- one artillery regiment
- one engineer regiment
- one service battalion
- one tactical helicopter squadron
- a field ambulance unit
- numerous ammunition bunkers
- administrative area with offices, living quarters and messing facilities
- a hospital
- a technical maintenance area

The base has 3 main entrances and 6 other entrances. A railway track runs through the base.

1.4 Chain of events

20 September 1990	Agreement between Canada and the Netherlands on a Protocol for the trial inspection based on CD/1033.
9 November 1990	Submission of a list of inspection equipment (in lieu of a certified list of approved equipment).
23 November 1990	15.00 hrs. The Netherlands submits a request for a challenge inspection.
23 November 1990	15.15 hrs. Receipt of request acknowledged.

23 November 1990	15.40 hrs. Canadian Embassy in the Hague notified of the request.
23 November 1990	16.30 hrs. Inspection team tasked.
25 November 1990	15.25 hrs. Arrival of inspection team and requesting state observer at point of entry.
25 November 1990	16.35 hrs. Observer notifies head of in-country escort and head of inspection team of the inspection site.
25 November 1990	16.40 hrs. Head of inspection team notifies head of in-country escort of suspected violation. Pre-inspection briefing time agreed.
26 November 1990	08.00 hrs. Pre-inspection briefing.
26 November 1990	08.35 hrs. Start of Inspection.
28 November 1990	08.35 hrs. End of Inspection.
28 November 1990	11.05 hrs. Debriefing
28 November 1990	15.30 hrs. End of in-country period.

1.5 The suspected violation

Although neither Canada nor The Netherlands develops, stockpiles or possesses chemical weapons, as a basis for the exercise a challenge inspection was requested by The Netherlands at the Canadian base on the grounds that chemical weapons, munitions or devices were suspected to be present there in contravention of article I, part 1, of the Convention on Chemical Weapons.

1.6 Preliminary findings

No signs of the presence of chemical weapons, munitions or devices were found. The preliminary findings of the inspection team, however, noted uncertainty about the identity of on-site facilities under the control of another state (outside the exercise). They also indicated that no on-site analysis of the samples took place and that the results of this analysis, conducted off-site, would need to be taken into account in the final report.

1.7 Composition of the teams

A. The inspection team

The Inspection Team consisted of 9 Dutch and 2 Canadian inspectors and 2 Dutch and 2 Canadian inspection assistants. In the light of earlier experience acquired in national trial inspections in various countries, an effort was made not to exaggerate the size of the team. This was facilitated by a decision not to have samples analysed on-site.

The team included :

a. Inspectors

1. The head of the team, a lieutenant-colonel of the Royal Netherlands Air Force Verification Department.

2. A Deputy head (former head of the Disarmament and International Peace Affairs Division of the Netherlands Ministry of Foreign Affairs).

3. Three chemical experts equipped to take samples.

4. Two NBC experts

5. An ammunitions expert

6. A doctor, specialized in NBC defence.

7. An infrastructure expert

b. Inspection assistants

1. Two Canadian and two Dutch NCOs (Non-Commisioned Officers) who secured the inspection site and patrolled its perimeter.

B. The in-country escort

The Canadian in-country escort consisted mainly of military personnel trained to conduct similar operations in the context of the Treaty on Conventional Armed Forces in Europe. They were augmented by military personnel representing the inspected site as well as by a defence scientist familiar with the CW negotiations in Geneva.

C. The observer

One official from The Netherlands played the role of observer from the requesting state party. In Geneva, there is as yet no clearly formulated concept of the role of the observer representing the state that has requested an inspection. Some delegations consider that the observer may be present throughout the inspection. Others believe that, while the observer should be in the vicinity, he or she need only be informed of the progress of the inspection without being present at all stages of the inspection. Yet others believe that, for security reasons, the presence of an observer at the inspection is not at all warranted. The Netherlands and Canada agreed to include an observer in the inspection so as to evaluate any security concerns which might result from the observer's presence. Another important reason for including an observer from the requesting state party was to enhance the credibility of the inspection team's report.

In order to take full advantage of the role-play elements inherent in the trial inspection and so allow the rights and obligations of the observer to become clear, it was decided that the observer could attend most stages of the inspection, but with some provisions for restricting his/her access when considered necessary by the in-country escort.

D. The guest observers

It had been decided beforehand that the trial challenge inspection would be strictly bilateral in nature. In view of the fact that the Canadian base is located on German territory, two "guest observers" from the "Host State" were invited to be present at all phases of the inspection, although they had no official role in the bilateral exercise.

E. The arbiters

For the sake of the exercise, the Inspection Protocol provided for the participation of a Canadian and a Dutch arbiter. Their role was to supervise all proceedings in relation to the inspection and to settle any dispute that might arise during the inspection. They also played the role of the Technical Secretariat of the future CW Convention.

1.8 Differences between the Inspection Protocol (IP) and the Protocol on Inspection Procedures (PIP) as included in the "Rolling Text"

The trial inspection was carried out in accordance with an agreed Canada/Netherlands Inspection Protocol (IP) which was based on the Protocol on

Inspection Procedures (PIP) in the "rolling text" of the CW convention (CD/1033 of 10 August 1990). Those delegations which are interested in the Canadian/Netherlands Inspection Protocol can obtain a copy (in English) from the Canadian or Netherlands delegation to the CD.

Certain parts of the PIP were changed or deleted to align the text with the prerequisites of the particular circumstances of the exercise. These included the following:

A. In the definitions, the role of the inspection assistants was limited to securing the site and patrolling its perimeter. (In the PIP, no such constraints are put on the role of inspection assistants. They were introduced here solely for exercise purposes.) Entries were made for the guest observers and the arbiters.

B. The sections on
- "designation of inspectors and inspection assistants"
- "privileges and immunities"
- "points of entry"
- "arrangements for use of unscheduled aircraft"

were either deleted or revised, essentially for exercise-related reasons.

C. In the administrative arrangements, a paragraph was included which stipulated that the language of the inspection was to be English. Another paragraph constrained the size and composition of the inspection team, for exercise related reasons.

D. Under "approved equipment", a paragraph was included that provided for a list of all inspection equipment to be available to the requested State at least two weeks before the inspection. This was done because there is not yet a list of approved equipment.

Instead of documents authenticating the equipment, documents explaining the type and function of each piece of equipment were to be attached by the inspection team.

E. With respect to the notification, the IP opted for the procedure whereby the site is notified after arrival at the point of entry rather than simultaneously with the notification of the request to the inspected state party. The IP stipulated that the inspection team should arrive at the point of entry not later than 48 hours after the receipt of the request.

F. In order not to unduly hamper everyday work at the inspection site, it was agreed that the inspection team - in securing the site - would not inspect individual vehicles leaving or entering the site. The IP provided for the

monitoring of all traffic. In the event of any suspicious activity, the matter would be brought to the attention of the head of the inspection team who would then pursue other measures as required.

G. The time available for the pre-inspection briefing was limited to the maximum of one hour. The IP also provided the possibility for the inspection team to tour the site and to make a helicopter overflight after the briefing to assist it in the preparation of the inspection plan.

H. Under "general rules", a paragraph was added that stated that subgroups of the inspection team should consist of no fewer than two inspectors or inspection assistants.

I. The IP stipulated that the observer had the right to arrive at the site, to attend the pre-inspection briefing, to receive a copy of the inspection plan and to be kept fully informed by the head of the inspection team about the conduct of the inspection and the findings thereof throughout the inspection. Furthermore two paragraphs were added concerning the observer's activities and his access to facilities.

J. New sections on the guest observers and the arbiters were included in the IP because of exercise requirements.

K. A section on liability was included in the IP in the event of accidents in the course of the exercise.

L. It was agreed that means of communication should conform to power and frequency instructions established by the inspected state party.

M. A provision was made in the IP that, in the event the inspected State Party were to object to questions posed to site personnel, the questions were then to be provided in writing by the head of the inspection team. The inspected State Party would be required to submit a reply to the questions within 45 minutes.

N. Under the IP, the inspectors themselves had the right to collect samples. It was agreed that samples would be analysed off-site. All procedures concerning the handling of samples after the in-country period were deleted.

O. The section on extension of the inspection site was revised to allow a modified request to be submitted by the observer of the requesting state party to the arbiters and the in-country escort. A contiguous location could become subject to inspection within two hours after the submission of the written request.

P. The duration of the inspection was not to exceed 48 hrs and could be extended by no more than 6 hrs or, if the inspection were to be delayed because safe access to the site was not possible, by the time needed to guarantee safe access.

Q. The departure was to take place "as soon as possible" rather than "within 24 hrs" as mentioned in the PIP.

R. The section on reports was revised to meet trial requirements.

1.9 Preparation for the inspection

A. Element of surprise

In the absence of a Chemical Weapons Convention and agreed procedures, it was decided to inform the Canadian Base Commander in advance of the time of the trial inspection. The Commander was also extensively briefed on details of the Geneva "Rolling Text" some weeks before the inspection. While this decision had the drawback that it eliminated the element of surprise, it also had a number of benefits:

- Because of the prior agreement on procedures to be followed in securing the site, it was possible to reduce the size of the inspection team. A real challenge inspection under the Chemical Weapons Convention might have led to a complete suspension of the Base's activities, with all the additional costs which that would have entailed.

- Informing the Commander resulted in cooperation in the preparations for the inspection in such matters as filing of flight plan, receipt and dispatch of the inspection team's aircraft, and arrangement of accommodation, meals and local transportation. It also enabled the Base's senior personnel to make preparations for managed access, and to brief the rest of the Base personnel, matters which in due course will probably be embodied by all States Parties in standing orders for their armed forces.

B. Test equipment

It was agreed beforehand that analysis of samples would be carried out at the TNO laboratories in The Netherlands. Therefore the inspectors carried only sampling and detection equipment. It was intended to use X-ray equipment but this had to be left in The Netherlands at the last moment, due to other operational requirements. (See annex A for full list of equipment).

C. Customs

It was necessary to clear the outgoing inspection equipment with the Netherlands customs. In a real life situation, time would have been too short to obtain all the necessary documents, unless standing arrangements had been agreed upon beforehand.

D. Liability

Without prejudice to efforts in the CD to address the issue of liability in the event of accidents during inspection-related activities, a provison was added to the IP governing liability for accidents and injuries for which the "rolling text" provides no rules or procedures. A temporary solution, devised for this trial inspection only, was arranged by referring to NATO provisions.

E. Managed access

During early deliberations on the trial inspection there was a suggestion that it might be useful to build in artificial managed access situations. It was decided, however, that the Canadian Base should be inspected as it would be found in reality and no artificial elements were included in the inspection.

2. CONCLUSIONS AND RECOMMENDATIONS

2.1 Customs

It will be necessary for the future CW Organization to conclude a standard agreement with customs in its Host State, in order to facilitate the dispatch of inspection teams with their equipment.

2.2 Site of the inspection team and operation of the inspection site

Taking into acount that the inspection should not unduly hamper the normal operation of the inspection site, additional inspection and inspection assistants may be required to monitor outgoing traffic (air, land or sea). Disruption of normal activity is a potential area of dispute.

Further consideration should be given to the practicalities of inspection team monitoring of outgoing traffic, notably transport aircraft. In the first instance this might only involve a basic "sweep" with detection equipment unless particular circumstances warrant more stringent and intrusive measures.

2.3 Composition of the inspection team

Since there is uncertainty as to when the inspection site will be identified - i.e. in the initial notification by the requesting State Party or after arrival at the point of entry - it should be noted that the latter option poses particular difficulties in the selection of appropriate inspectors and inspection assistants.

The negotiations in the CD should give further serious consideration to this issue, bearing in mind the need to ensure the inspection team's effectiveness in fulfilling its mandate.

2.4 Specification of beginning of inspection time

Existing timelines in the Protocol on Inspection Procedures (PIP) leave considerable opportunity for dispute and delay, in that they do not clearly specify time limits within which the inspection must begin.

The PIP should be refined to take this matter into account. It should specify a maximum time that could elapse between the arrival of the inspection team at the point of entry and the actual start of the inspection.

2.5 Third-State facilities at the inspection site

Disputes and delays could result in relation to access to third-state facilities at the inspection site.

This issue should be addressed in the negotiations in the CD.

Since the actual inspection site may not be notified until after arrival at the point of entry (as mentioned in para 2.3 above), this could cause serious complications in terms of liaison between the inspected State Party and the authorities of other states having facilities at the inspection site.

This issue of time of notification of the inspection site to the inspected State Party, and its relationship to third-state facilities, should also be addressed in the negotiations in the CD.

2.6 Arrival at point of entry/inspection of equipment

To facilitate the ordered approach to subsequent activities, the procedures on arrival at the point of entry should run smoothly. The roles and identities of the various participants should be clear from the start. General procedures should be considered for the inspection of personal luggage (in keeping with standard security procedures) as distinct from checking the inspection equipment.

2.7 Time for pre-inspection briefing

The time constraint of one hour for the pre-inspection briefing was considered adequate by all participants. In practice, the time might be extended by mutual agreement between the head of the inspection team and the head of the in-country escort.

2.8 Helicopter overflight

A helicopter overflight would be very useful in assisting the inspection team to draft an adequate and effective inspection plan.

2.9 Communications with observer's National Authorities

The requesting State Party may not have an embassy in the country in which the challenge inspection is taking place (inspected State Party or Host State). In these circumstances the observer of the requesting State Party should be permitted to communicate with his/her capital directly.

2.10 Observer's observation of Inspection Activities

By observing the inspection (sub-)teams conducting their inspection activities, the observer may be in a much better position to advise his national authorities on the efficacy of the conduct of the inspection and on its findings.

For this reason, the CD should give careful consideration to the issue of participation in a challenge inspection of an observer of the requesting State Party.

The observer should not in any way interfere in the inspection activities of the inspection team. Should he have any comments or suggestions, he should make them to the head of the inspection team who may, as circumstances permit, decide whether or how to take such comments or suggestions into account.

The observer should be allocated separate communication means to communicate with the head of the inspection team.

2.11 Observer's participation in inspection de-briefing

Rather than simply receiving the report on preliminary findings from the head of the inspection team, the observer will likely wish to be present at the inspection de-briefing if that is permitted.

Some flexibility should be maintained to allow the observer to participate in the inspection de-briefing, although the head of the inspection team or the head of the in-country escort should each retain the right to deny participation of the observer to any part or all of the de-briefing.

2.12 Taking of samples

Should the "Rolling Text" eventually specify that the inspectors rather than the in-country escorts take samples, it should be possible to allow some flexibility in this regard, depending on the type of facility being inspected, taking into account concerns about the security/liability of the persons concerned.

2.13 Custody of samples

The issues of the chain of custody of samples during storage, transport and analysis should be further developed in the CD. Procedures might require specialized personnel.

2.14 Medical records

The issue of inspection of medical records with regard to the protection of privacy of patients should be addressed in the negotiations in the CD.

2.15 Liability

The question of liability for accidents that may occur during an inspection should be addressed in the negotiations in the CD.

2.16 Managed Access

The trial challenge inspection showed that, under circumstances of managed access, sensitive information at this type of inspection site could be adequately protected while at he same time providing the inspection team with enough information to draw reliable conclusions with regard to the presence of chemical weapons.

ANNEX A

List of Inspection Equipment

1. Two chemical sampling kits

   The kit contains (per kit):
   - 10 Chrompack Tenax-tubes (160 x 6 mm) for the sampling of gases or vapours; these tubes are closed using Swagelok caps. A Dräger gas detector pump (model 31) can be used to suck 200-300 ml of air through the tube.
   - 10 Venoject disposable evacuated 10 ml test tubes in combination with plastic holders and multi-sample needles with a Luer adapter for the sampling of liquids. The plastic holders are provided with a protruding ring to simplify the insertion of the needle into the tube giving a safe and convenient sampling of liquids.
   - 10 wide-mouthed, flat-bottomed bottles of 25 ml with screw-caps and teflon seals for the sampling of solid materials.
   - cotton wool and one bottle (100 ml) with acetone to swob solid surfaces
   - 5 pairs of latex gloves
   - 100 small polythene bags
   - 100 self-adhesive labels
   - 1 water resistant marker
   - 2 spanners 1/2-9/16"
   - 2 spatulas
   - 1 pair of scissors
   - 1 note-book
   - 250 g of coarse grained charcoal
   - narrow bore teflon tubing to be connected with the pump and injection needles allowing remote sampling.

2. Two Gas Reconnaissance kits (G.V.U.)

3. Two Chemical Agent Monitors (CAM)

4. Two Water Testing kits

5. One "Golden Inspectors" X-ray apparatus & Developing Unit

6. One mantle thickness meter

7. One Toolkit which contains:
   - 2 x box, X-ray radiographs of 15 each
   - 1 x stethoscope IED, BDA 2049
   - 3 x Bahco
   - 3 x screw driver
   - 2 x Philips screw driver
   - 1 x end cutters
   - 1 x pipe wrench
   - 1 x tyre lever
   - 1 x hammer
   - 1 x cold chisel
   - 1 x MAG LITE
   - 1 x flexible steel ruler
   - 1 x caliper gauge
   - 1 x measuring tape
   - 1 x reference tape

8. One portable navigation receiver type Magellan GPS NAV 1000

9. Seven dictaphones with 14 cassettes

10. Three binoculars

11. Four Pincers, thread and bag of small lead seals

12. Two padlocks

13. Nine NBC protective suits

14. Fifteen NBC protective masks

15. One lap-top computer

16. Three general purpose carrier bags